

10653037

FILE 'CAPLUS' ENTERED AT 09:13:15 ON 19 SEP 2007

L1 E BARRESI F/IN,AU  
31 S E4-8  
E ANTRIM R/IN,AU  
L2 57 S E3-12  
L3 78 S L1 OR L2  
L4 5059 S MALTODEXTRIN  
L5 1360 S MALTOOLIGOSACCHARIDE  
L6 15 S L3 AND (L4 OR L5)  
L7 1 S 2002:47559/AN  
L8 282524 S HYDROGENAT?  
L9 24049 S DP  
L10 156167 S DE  
L11 6312 S L4 OR L5  
L12 314 S L8 AND L11  
L13 309 S L12 NOT L6  
L14 11 S L13 AND (L9 OR L10)  
L15 298 S L13 NOT L14  
L16 4376569 S DEGREE  
L17 18728 S DEXTROSE  
L18 112 S L15 AND (L16 OR L17)  
L19 7 S L11 (W) 8  
L20 7 S L19 NOT (L6 OR L14)  
L21 20 S L11 (W) L8  
L22 17 S L21 NOT (L6 OR L14)  
L23 281 S L15 NOT L22  
L24 28453 S RANEY  
L25 1375246 S ACTIVAT?  
L26 629918 S NI  
L27 650175 S NICKEL  
L28 609 S L25 (W) (L26 OR L27)  
L29 1 S L23 AND (L24 OR L28)

L6 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2006:657354 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 145:102596  
 TITLE: Dextrinized, saccharide-derivatized oligosaccharides  
 INVENTOR(S): Antrim, Richard L.; Barresi, Frank  
 W.; Mcpherson, Roger E.  
 PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S.  
 Ser. No. 874,686.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006149053	A1	20060706	US 2005-292246	20051201
US 2004053886	A1	20040318	US 2003-601912	20030623
US 2005048191	A1	20050303	US 2004-874686	20040622
US 2005282777	A1	20051222	US 2005-184989	20050720
WO 2007064405	A1	20070607	WO 2006-US39217	20061006

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,  
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,  
 GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,  
 KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,  
 MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,  
 RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:  
 US 2002-390570P P 20020621  
 US 2003-482045P P 20030623  
 US 2003-601912 A2 20030623  
 US 2004-874686 A2 20040622  
 US 2005-292246 A 20051201

AB Saccharide-derivatized oligosaccharides prepared by extruding a reaction mixture comprising a saccharide having a d.p. ranging from 1 to 4 and a starch having a d.p. of at least 200, wherein the extruding imparts sufficient energy and work to derivatize the starch with the saccharide. Thus, a blend of maltodextrins/anhydrodextrose/citric acid (87.5%/12.5%/1.0%) was made by mixing 1312.5 g of MALTRIN M100 and other MALTRIN products with 187.5 g of anhydrodextrose and 15 g of citric acid and extruded.

L6 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:630338 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 143:133630  
 TITLE: Preparation and thermal stability of reduced  
 malto-oligosaccharides via catalytic hydrogenation  
 reaction  
 INVENTOR(S): Antrim, Richard L.; Barresi, Frank  
 W.  
 PATENT ASSIGNEE(S): Grain Processing Corp., USA  
 SOURCE: U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 366,065.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6919446	B1	20050719	US 2000-614961	20000713
WO 9936442	A1	19990722	WO 1999-US1098	19990119

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,  
 DK, EE, ES, FI, GB, GD, GE, GH, GM, HN, HU, ID, IL, IN, IS, JP,  
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,

MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
 TR, TT, UA, UG, US, UZ, VN, YU, ZW  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,  
 CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6613898 B1 20030902 US 1999-366065 19990802  
 CA 2350434 A1 20020113 CA 2001-2350434 20010614  
 EP 1172368 A1 20020116 EP 2001-305247 20010615

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO

MX 2001PA06093 A 20050606 MX 2001-PA6093 20010615  
 JP 2002047296 A 20020212 JP 2001-183885 20010618  
 BR 2001002570 A 20020430 BR 2001-2570 20010626  
 JP 2004137501 A 20040513 JP 2003-355156 20031015

PRIORITY APPLN. INFO.:

US 1998-71905P P 19980120  
 WO 1999-US1098 A1 19990119  
 US 1999-366065 A2 19990802  
 US 2000-614961 A 20000713  
 JP 2001-183885 A3 20010618

AB Disclosed are a method for the reduction of an oligosaccharide mixture and an oligosaccharide mixture prepared thereby. In accordance with the disclosed invention, a mixture of oligosaccharides having a given DP profile is reduced to a DE of essentially zero by catalytically hydrogenation the mixture under reaction conditions sufficient to preserve the DP profile of the mixture, which reaction conditions typically include a reaction temperature ranging from about 50°C. to about 150°C. and a reaction pressure of at least about 1500 psi. Surprisingly, when the mixture is a malto-oligosaccharide mixture, the reduced mixture will have a superior color-fastness and thermal stability as compared to a similar unreduced mixture of malto-oligosaccharides, and also low reactivity towards nitrogen-containing species.

REFERENCE COUNT: 94 THERE ARE 94 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:394558 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 142:429176  
 TITLE: Isomaltooligosaccharide-containing food and beverage products with controlled energy release  
 INVENTOR(S): Barresi, Frank W.; Wang, Jiao  
 PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005095350	A1	20050505	US 2004-947060	20040922
PRIORITY APPLN. INFO.:			US 2003-504713P	P 20030922

AB Food products, in particular sports drinks and energy bars, are formulated to include isomaltooligosaccharides. At least 35% of the nutritive carbohydrate content of the food product may comprise an isomaltooligosaccharide;  $\geq 35\%$  of the caloric content of the food product may be attributed to the isomaltooligosaccharide. The isomaltooligosaccharide may be present in an amount effective to provide a nutritive caloric content of  $\geq 50$  kcal. Thus, 65 g isomaltooligosaccharide, 35 g maltodextrin, 50 g protein, and 800 g water are blended to form a nutritional beverage.

L6 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:14445 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 142:96246  
 TITLE: Saccharide-derivatized oligosaccharides useful for bulking agents  
 INVENTOR(S): Antrim, Richard L.; Barresi, Frank W.; McPherson, Roger E.; Wang, Jiao  
 PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005000905	A1	20050106	WO 2004-US20043	20040623
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
RW:			BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
CA 2530379	A1	20050106	CA 2004-2530379	20040623
EP 1636271	A1	20060322	EP 2004-776933	20040623
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK	
PRIORITY APPLN. INFO.:			US 2003-482045P	P 20030623
			WO 2004-US20043	W 20040623

AB Disclosed are saccharide-derivatized oligosaccharides. The derivatized oligosaccharides preferably are prepared by extruding a reaction mixture comprising a saccharide having a DP ranging from 1 to 4, oligosaccharide having a d.p. of at least 5, and, optionally an oligosaccharide having a d.p. of at least 20. The products are low in digestibility, and thus in various embodiments are suitable for use as bulking agents, for controlled energy release products, and for other purposes.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:2900 CAPLUS <<LOGINID::20070919>>

DOCUMENT NUMBER: 140:58735

TITLE: Dextrinized, saccharide-derivatized oligosaccharides as bulking agents and energy slow-release agents for food and feed use.

INVENTOR(S): Antrim, Richard L.; Barresi, Frank W.; Mcpherson, Roger E.; Wang, Jiao

PATENT ASSIGNEE(S): Grain Processing Corporation, USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000860	A2	20031231	WO 2003-US19810	20030623
WO 2004000860	A3	20040513		
W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	
RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	
CA 2490092	A1	20031231	CA 2003-2490092	20030623
AU 2003277860	A1	20040106	AU 2003-277860	20030623
EP 1521534	A2	20050413	EP 2003-742156	20030623
R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK	
PRIORITY APPLN. INFO.:			US 2002-390570P	P 20020621
			WO 2003-US19810	W 20030623

AB Disclosed are saccharide-derivatized oligosaccharides. The derivatized oligosaccharides preferably are prepared by extruding a maltooligosaccharide mixture with a saccharide or mixture of saccharides having a DP ranging from 1 to 4. The products are low in digestibility, and thus in various embodiments are suitable for use as bulking agents, for controlled energy release products, and for other purposes.

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:571579 CAPLUS <<LOGINID::20070919>>  
DOCUMENT NUMBER: 139:99999  
TITLE: Maltooligosaccharides from corn  
AUTHOR(S): Barresi, Frank; Eads, Angela; Keuyon, Melanie  
CORPORATE SOURCE: Research Department, Muscatine, IA, 52761, USA  
SOURCE: ACS Symposium Series (2003), 849(Oligosaccharides in Food and Agriculture), 182-195  
CODEN: ACSMC8; ISSN: 0097-6156  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal; General Review  
LANGUAGE: English

AB A review. The conversion of cornstarch to maltooligosaccharides is an area of significant com. interest. The production of maltooligosaccharides on an industrial scale was practiced for over 30 yr. The products are used in a variety of applications, which include the food and pharmaceutical industries. This article will focus on the com. production, characterization and applications of this product. In addition, recent progress in this area will be summarized.  
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:556136 CAPLUS <<LOGINID::20070919>>  
DOCUMENT NUMBER: 137:93949  
TITLE: Preparation of malto-oligosaccharide derived glycosides via acid-catalyzed glycosylation reaction  
INVENTOR(S): Rogers, Richard G.; Barresi, Frank W.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 2002099185	A1	20020725	US 2000-726708	20001130
US 6528629	B2	20030304		
PRIORITY APPLN. INFO.:			US 2000-726708	20001130

OTHER SOURCE(S): CASREACT 137:93949

AB Disclosed is a method for preparing a malto-oligosaccharide derived glycoside. Generally, the method comprises providing a malto-oligosaccharide and acid-catalyzed glycosylating the malto-oligosaccharide with an alc. or a thiol under conditions suitable to form a malto-oligosaccharide derived glycoside. Also disclosed is a method for preparing a mixture of malto-oligosaccharide derived glycosides by providing a mixture of malto-oligosaccharides and glycosylating the malto-oligosaccharides with an alc. or a thiol under substantially anhydrous conditions to form a mixture of malto-oligosaccharide derived glycosides.

L6 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:384880 CAPLUS <<LOGINID::20070919>>  
DOCUMENT NUMBER: 136:374518  
TITLE: Lanthionizing hair compositions containing reduced maltooligosaccharides  
INVENTOR(S): Barresi, Frank W.; Antrim, Richard L.  
PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
SOURCE: U.S., 4 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent

LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6391293	B1	20020521	US 2000-693497	20001020
PRIORITY APPLN. INFO.:			US 1999-160726P	P 19991020

AB A lanthionizing (relaxing) hair composition comprises a lanthionizing agent, such as guanidine hydroxide or sodium hydroxide, and a reduced malto-oligosaccharide. For example, a composition comprising 2.4% by weight guanidine hydroxide, 5.0% by weight of a reduced Maltrin M 180, and the balance water was prepared

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:186276 CAPLUS <<LOGINID::20070919>>  
 TITLE: Maltooligosaccharides from Corn  
 AUTHOR(S): Barresi, Frank; Eads, Angela; Kenyon, Melanie  
 CORPORATE SOURCE: Research Department, Grain Processing Corporation, Muscatine, IA, 52761, USA  
 SOURCE: Abstracts of Papers, 223rd ACS National Meeting, Orlando, FL, United States, April 7-11, 2002 (2002), CARB-031. American Chemical Society: Washington, D. C.  
 CODEN: 69CKQP  
 DOCUMENT TYPE: Conference; Meeting Abstract  
 LANGUAGE: English

AB The conversion of cornstarch to maltooligosaccharides is an area of significant com. interest. The production of maltooligosaccharides on an industrial scale has been practiced for over 30 yr. The products are used in a variety of applications, which include the food and pharmaceutical industries. This presentation will focus on the com. production, characterization, and applications of this important product. In addition, future developments and activity in this area will be discussed.

L6 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:47559 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 136:69107  
 TITLE: Catalytic hydrogenation of maltooligosaccharides  
 INVENTOR(S): Antrim, Richard L.; Barresi, Frank W.  
 PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
 SOURCE: Eur. Pat. Appl., 18 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1172368	A1	20020116	EP 2001-305247	20010615
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6919446	B1	20050719	US 2000-614961	20000713
PRIORITY APPLN. INFO.:			US 2000-614961	A 20000713
			US 1998-71905P	P 19980120
			WO 1999-US1098	A1 19990119
			US 1999-366065	A2 19990802

AB A mixture of oligosaccharides having a given d.p. profile is reduced to a dextrose equivalent of 0 by catalytically hydrogenating the mixture under reaction conditions sufficient to preserve the d.p. profile of the mixture, which reaction conditions typically include a reaction temperature ranging from about 50° to about 150° and a reaction pressure of at least about 1500 psi. When the mixture is a maltooligosaccharide mixture, the reduced mixture will have a superior color-fastness and thermal stability as compared to a similar unreduced mixture of maltooligosaccharides, and also low reactivity towards

nitrogen-containing species. Thus, to 450 mL water was added 265 g Maltrin M100 maltodextrin (5.5% moisture). The mixture was stirred for 30 min at room temperature to obtain a clear solution. To the solution was added 22.4 g of a 50% slurry of activated nickel (Acros) in water (9% weight/weight catalyst/maltodextrin). This solution was stirred for another 10 min, and the pH was measured as pH 8.5. The mixture was transferred to a 2.0L Parr 4522M reactor. The reactor was sealed and stirring was commenced at 550 rpm. Subsequently, the reactor was pressurized to 1150 psi with hydrogen gas and heated to 115° to initiate hydrogenation of the maltodextrin. After five hours, the reaction was stopped by cooling, and the vessel was then depressurized.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2001:661643 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 135:225946  
 TITLE: High purity maltose process and products  
 INVENTOR(S): Antrim, Richard L.; Lee, Clark P.  
 PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
 SOURCE: PCT Int. Appl., 23 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064934	A2	20010907	WO 2001-US6451	20010228
WO 2001064934	A3	20020214		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2368501	A1	20010907	CA 2001-2368501	20010228
AU 200143338	A	20010912	AU 2001-43338	20010228
US 2001046690	A1	20011129	US 2001-795996	20010228
US 6670155	B2	20031230		
BR 2001004706	A	20020115	BR 2001-4706	20010228
US 2002012973	A1	20020131	US 2001-796027	20010228
US 6436678	B2	20020820		
EP 1196621	A2	20020417	EP 2001-916297	20010228
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
MX 2001PA10889	A	20020621	MX 2001-PA10889	20011026
US 2003113876	A1	20030619	US 2002-223321	20020819
US 2003134394	A1	20030717	US 2003-351151	20030124
US 2004092732	A1	20040513	US 2003-695126	20031028
PRIORITY APPLN. INFO.:			US 2000-185474P	P 20000228
			US 2001-795996	A3 20010228
			US 2001-796027	A1 20010228
			WO 2001-US6451	W 20010228

AB Maltose products are prepared by hydrolyzing starch with an enzyme that consists essentially of a beta-amylase enzyme. The product thus prepared may be spray dried, or a high purity maltose product may be obtained therefrom via ultrafiltration. The high purity maltose product has a low content of glucose and saccharides in the DP 3-10 range. Thus, yellow dent corn starch from a wet milling process was liquefied by jet cooking. The pH of the starch liquefact was adjusted to 5.5 and the the liquefact was then saccharified with  $\beta$ -amylase. The resulting solution was centrifuged to remove retrograded amylose, and ultrafiltered through a 3000 mol. weight cut off membrane. The resulting permeate contained 97.9% maltose, 0.2% dextrose, 0.4% maltotriose and 1.4% larger maltooligosaccharides.

ACCESSION NUMBER: 2001:300830 CAPLUS <<LOGINID::20070919>>  
DOCUMENT NUMBER: 134:312859  
TITLE: Reduced maltooligosaccharide cleansing compositions  
INVENTOR(S): Barresi, Frank W.; Antrim, Richard L.; Freers, Susan O.  
PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
SOURCE: PCT Int. Appl., 23 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001029164	A1	20010426	WO 2000-US29141	20001020
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2352269	A1	20010426	CA 2000-2352269	20001020
AU 2001010998	A	20010430	AU 2001-10998	20001020
EP 1141193	A1	20011010	EP 2000-972319	20001020
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003512508	T	20030402	JP 2001-531951	20001020
BR 2000007202	A	20050412	BR 2000-7202	20001020
US 2002072483	A1	20020613	US 2001-801352	20010307
US 6475979	B2	20021105		

PRIORITY APPLN. INFO.: US 1999-160602P P 19991020  
WO 2000-US29141 W 20001020

AB In accordance with the invention, a cleansing product includes a surfactant and a reduced maltooligosaccharide as structurant, filler, or thickener. The product exhibits improved colorfastness, thickening ability, mildness, textural feel, structural feel, billet d., and shelf life.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2001:300422 CAPLUS <<LOGINID::20070919>>  
DOCUMENT NUMBER: 134:316113  
TITLE: Pharmaceutical compositions containing reduced maltooligosaccharide preservatives  
INVENTOR(S): Barresi, Frank W.; Antrim, Richard L.  
PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
SOURCE: PCT Int. Appl., 35 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001028325	A2	20010426	WO 2000-US29142	20001020
WO 2001028325	A3	20011108		
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,				



CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 CA 2353536 A1 20010426 CA 2000-2353536 20001020  
 AU 2001010999 A 20010430 AU 2001-10999 20001020  
 EP 1143792 A2 20011017 EP 2000-972320 20001020  
 EP 1143792 A3 20020918  
 EP 1143792 B1 20060712

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, CY

BR 2000007201 A 20011030 BR 2000-7201 20001020  
 JP 2003511549 T 20030325 JP 2001-530930 20001020  
 US 6593469 B1 20030715 US 2000-693496 20001020  
 AT 332638 T 20060815 AT 2000-972320 20001020  
 US 2002115637 A1 20020822 US 2002-43365 20020109  
 US 6610672 B2 20030826  
 US 2003180397 A1 20030925 US 2003-360538 20030206  
 US 6828310 B2 20041207

## PRIORITY APPLN. INFO.:

US 1999-160611P P 19991020  
 US 1999-160615P P 19991020  
 US 2000-693496 A3 20001020  
 WO 2000-US29142 W 20001020

AB A composition contain a material (pharmaceutical) that is susceptible to degradation and a preserving agent in an amount effective to preserve the material comprising 1 or more reduced maltooligosaccharide species. The preserving agent can include a single reduced maltooligosaccharide species or a plurality of such species. The method generally includes contacting the material with a preserving agent containing a preserving effective amount of 1 or more reduced maltooligosaccharide species. Solns., powders, glasses, gels, and the like containing the chemical reactive material(s) and a preserving effective amount of 1 or more reduced maltooligosaccharide species may be prepared. Maltrin M100 maltodextrin was dissolved in water and reduced by NaBH<sub>4</sub> and the product was purified by chromatog. on Dowex Mono-88 and Dowex Mono-66 columns. An air-oxidizable amine was dissolved in the aqueous solution and the resulting solution was spray dried by using a spray dryer to produce a spray-dried powder.

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:152699 CAPLUS <<LOGINID::20070919>>  
 DOCUMENT NUMBER: 134:178760  
 TITLE: Preparation and mass spectra of derivatized reduced  
 malto-oligosaccharides  
 INVENTOR(S): Antrim, Richard L.; Barresi, Frank  
W.  
 PATENT ASSIGNEE(S): Grain Processing Corporation, USA  
 SOURCE: PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014394	A2	20010301	WO 2000-US40687	20000818
WO 2001014394	A3	20010830		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6380379	B1	20020430	US 1999-378673	19990820
CA 2346094	A1	20010301	CA 2000-2346094	20000818
CA 2346094	C	20061128		
AU 200080328	A	20010319	AU 2000-80328	20000818
EP 1144424	A2	20011017	EP 2000-971032	20000818
EP 1144424	A3	20011031		
EP 1144424	B1	20051207		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI,			

LT, LV, FI, RO, CY

JP 2003507539	T	20030225	JP 2001-518724	20000818
AT 312112	T	20051215	AT 2000-971032	20000818
BR 2000007001	A	20060829	BR 2000-7001	20000818
MX 2001PA03959	A	20011011	MX 2001-PA3959	20010420
US 2002132310	A1	20020919	US 2001-23077	20011213
US 6720418	B2	20040413		
US 2004138444	A1	20040715	US 2003-731255	20031209
US 7091335	B2	20060815		

PRIORITY APPLN. INFO.:

US 1999-378673	A	19990820
WO 2000-US40687	W	20000818
US 2001-23077	A1	20011213

AB Disclosed are derivatized malto-oligosaccharides and methods for the preparation thereof. In accordance with the disclosed invention, a malto-oligosaccharide is hydrogenated to thereby obtain a hydrogenated malto-oligosaccharide, and the resulting hydrogenated malto-oligosaccharide is derivatized, such as via oxidation, esterification, etherification, or enzymic modification. The derivatization of such hydrogenated malto-oligosaccharides results in a surprisingly low level of a formation of byproducts and products of degradation. In a particularly preferred embodiment of the invention, a mixture of malto-oligosaccharides is catalytically hydrogenated under reaction conditions suitable to substantially preserve the d.p. (DP) profile of the mixture. The resulting malto-oligosaccharide mixture then is derivatized to form a derivatized malto-oligosaccharide mixture.

L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:464301 CAPLUS &lt;&lt;LOGINID::20070919&gt;&gt;

DOCUMENT NUMBER: 131:103706

TITLE: Reduced maltooligosaccharides and their manufactureINVENTOR(S): Barresi, Frank W.; Antrim, Richard L.

PATENT ASSIGNEE(S): Grain Processing Corporation, USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9936442	A1	19990722	WO 1999-US1098	19990119
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2318604	A1	19990722	CA 1999-2318604	19990119
CA 2318604	C	20070410		
AU 9923268	A	19990802	AU 1999-23268	19990119
BR 9907096	A	20001024	BR 1999-7096	19990119
EP 1049720	A1	20001108	EP 1999-903186	19990119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002509163	T	20020326	JP 2000-540157	19990119
US 6613898	B1	20030902	US 1999-366065	19990802
US 6919446	B1	20050719	US 2000-614961	20000713
MX 2000PA07087	A	20011203	MX 2000-PA7087	20000719
US 2003204081	A1	20031030	US 2003-378228	20030303
US 2005143573	A1	20050630	US 2004-963681	20041013

PRIORITY APPLN. INFO.:

US 1998-71905P	P	19980120
WO 1999-US1098	W	19990119
US 1999-366065	A2	19990802
US 2003-378228	A1	20030303

AB In accordance with the disclosed invention, oligosaccharides or mixts. of oligosaccharides having a given d.p. profile is reduced to a dextrose equivalent of essentially zero by hydrogenating under reaction conditions

10653037

sufficient to preserve the d.p. profile, which reaction conditions typically include a reaction temperature ranging from about 50 °C to about 150 °C and a reaction pressure ranging up to about 1500 psi. The reduction product has a superior color-fastness and thermal stability as compared to a similar unreduced maltooligosaccharides, and also low reactivity towards nitrogen-containing species.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:840751 CAPLUS  
 TITLE: Water Sorption and Glass Transition Behavior of Polyalditol (PD30), a New Nonreactive Malto-Oligosaccharide Cryo- and Drying-Protectant  
 AUTHOR(S): Sun, Wendell Q.  
 CORPORATE SOURCE: LifeCell Corporation, One Millennium Way, Branchburg, NJ, 08876, USA  
 SOURCE: Cell Preservation Technology (2007), 5(2), 77-84  
 CODEN: CPTECY; ISSN: 1538-344X  
 PUBLISHER: Mary Ann Liebert, Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Polyalditols are a new family of nonreactive polyols whose reducing power is reduced to <1% dextrose equivalent (DE) by catalytic hydrogenation of malto-oligosaccharides. This work investigated water sorption property and glass transition behavior of PD30, a polyalditol with an average mol. weight of .apprx.1000 Daltons and a DE value of <0.5. Properties of PD30 are compared with those of maltodextrin M180 (precursor of PD30), which has a DE of 16.5 to 19.5 and is used to make PD30. Water sorption properties were investigated by isothermal sorption and desorption methods. Sorption study showed that PD30 adsorbs less water than M180 at 22°C at relative humidity (RH) below 45%, but adsorbs more water at higher RH. The anal. with Guggenheim-Anderson-de Boer (GAB) model ests. the same monolayer hydration (.apprx.0.05 g/g) for both M180 and PD30, but PD30 could adsorb more weakly bound water. Thermal desorption study showed that PD30 binds significantly less water than M180 at temps. above 45°C. Glass transition temperature (Tg) of concentrated PD30 solns. was measured with differential scanning calorimetry. The Tg of PD30 is lower than that of M180 at the same solute concentration and upon equilibration to the same water activity, suggesting that water is a more effective plasticizer for PD30 than for M180. The onset Tg of the maximally freeze-concentrated PD30 aqueous solution (i.e., Tg') is -24.5 ± 1.2°C, which is lower than that of M180 (-20.2 ± 0.7°C). Unfrozen water content in the freeze-concentrated PD30 solution is 0.33 g/g. The onset Tg' is similarly depressed in the presence of NaCl for both M180 and PD30. We conclude that catalytic hydrogenation treatment of M180 alters water sorption property and glass transition behavior of PD30, which will have significant implications in drying process development and product stability.

L14 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:287055 CAPLUS  
 DOCUMENT NUMBER: 146:323547  
 TITLE: Compositions and methods for intranasal delivery of tricyclic cannabinoids  
 INVENTOR(S): Wermeling, Daniel P.  
 PATENT ASSIGNEE(S): University of Kentucky, USA  
 SOURCE: U.S. Pat. Appl. Publ., 11pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2007060639	A1	20070315	US 2006-515607	20060905
WO 2007032962	A2	20070322	WO 2006-US34562	20060905
WO 2007032962	A3	20070802		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,

10653037

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2005-715940P P 20050909

AB A pharmaceutical composition for intranasal administration to a human or non-human subject is provided, comprising a therapeutically active component that comprises at least one tricyclic cannabinoid in a liquid to semi-solid medium that comprises a pharmaceutically acceptable solubilizing agent in an amount effective to solubilize the cannabinoid. An amount of the composition intranasally administrable as a single dose, upon intranasal administration in a rat model, provides a systemic plasma cannabinoid concentration (i) that, at least at one time point during a period from about 15 min to about 2 h after said administration, is at least about 0.5 ng/mL, but (ii) that at no time exceeds about 100 µg/mL.

L14 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:342968 CAPLUS

DOCUMENT NUMBER: 144:368803

TITLE: Process for the incorporation of a flavor or fragrance

ingredient or composition into a carbohydrate matrix

INVENTOR(S): Subramaniam, Anandaraman; McIver, Robert Clark; Van  
Sleeuwen, Rutger M. T.

PATENT ASSIGNEE(S): Firmenich SA, Switz.

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006038067	A1	20060413	WO 2005-IB2412	20050812
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:				
AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1627573	A1	20060222	EP 2004-104014	20040820
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
EP 1781121	A1	20070509	EP 2005-805076	20050812
R:				
AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101005771	A	20070725	CN 2005-80027663	20050812
US 2007128234	A1	20070607	US 2007-671574	20070206
IN 2007KN00553	A	20070706	IN 2007-KN553	20070214
PRIORITY APPLN. INFO.:			EP 2004-104014	A 20040820
			US 2004-603954P	P 20040823
			US 2001-982648	A 20011018
			WO 2005-IB2412	W 20050812

AB A hot melt extrusion process is used for the preparation of an active ingredient, namely a flavor or fragrance, delivery system, wherein the quenching of the extruded product to form a glass is carried out with a cooling medium of a low temperature coolant such as liquid nitrogen. Thus, the extruded product comprises maltodextrin 18 DE 46.25, sucrose 42.72, orange oil 10.06, and lecithin 0.96 %.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:550829 CAPLUS

DOCUMENT NUMBER: 139:100250

TITLE: Sweetener compositions containing maltitol and  
hydrogenated starch hydrolysates with bimodal  
DP distribution

INVENTOR(S): Yang, Marguerite; Le, Anh Si; Chabot, Normand  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 7 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003131757	A1	20030717	US 2002-256386	20020927
PRIORITY APPLN. INFO.:			US 2001-325238P	P 20010927

AB The sweeteners comprise >50% maltitol (e.g., Maltisweet 3145) and hydrogenated starch hydrolyzates (e.g., Stabilite 1) containing  $\geq 8.5\%$  polysaccharides with d.p.  $\geq 11$ ,  $\leq 1\%$  polysaccharides with d.p. of 9 or 10.

L14 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:362543 CAPLUS  
 DOCUMENT NUMBER: 133:6090  
 TITLE: Low-DE starch hydrolyzates, their preparation by nanofiltration fractionation, and products therefrom  
 INVENTOR(S): Tang, Dan; Zhou, Liuming; Gerhardt, Robert; Abou-Nemeh, Ibrahim; Jaundoo, Carl; Parady, Tom  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 5,853,487.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6068705	A	20000530	US 1998-221902	19981228
US 5853487	A	19981229	US 1998-66651	19980427
CA 2269996	A1	19991027	CA 1999-2269996	19990423
EP 953578	A2	19991103	EP 1999-401001	19990423
EP 953578	A3	20000412		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000001502	A	20000107	JP 1999-120655	19990427
US 6348264	B1	20020219	US 2000-567315	20000509
PRIORITY APPLN. INFO.:			US 1998-66651	A2 19980427
			US 1998-221902	A 19981228

AB A low DE starch hydrolyzate, involves fractionating a starch hydrolyzate having a DE >.apprx.18 using a nanofiltration membrane, having a mol. weight cut-off of <.apprx.4000 daltons, under nanofiltration conditions that result in a DE <.apprx.25. A low DE starch hydrolyzate is blended with at least one other substance, e.g., a food, feed, or pharmaceutical ingredient, and/or can be formed into a heat- and storage-stable emulsion. The low DE starch hydrolyzate can be hydrogenated. A substantially dry ingredient encapsulate can be prepared by (1) forming an aqueous matrix composition comprising the low DE starch hydrolyzate; (2) mixing  $\geq 1$  ingredient with the matrix composition; and (3) drying the mixture. Thus, 15 gal clarified, decolored acid-converted corn syrup (DE .apprx.42, dry solids .apprx.23.7%) was pumped through a nanofiltration membrane (sulfonated polysulfone on polysulfone, nonwoven polyester backing), with retentate recycled back to the feed tank until .apprx.15 DE, giving .apprx.13 gal retrogradation-free maltodextrin (.apprx.50.5% solids) having DE 14.5 and carbohydrate profile fructose 0.048, dextrose 0.760, DP2 1.517, DP3 3.557, DP4 6.627, DP5 8.359, DP6 8.442, DP7 7.960, DP8 7.375, DP9 6.759, DP10 5.835, DP11-21 32.226, and DP21+ 10.534 weight%. After evaporation to 65-75% solids, and storage for 4 mo, the maltodextrin was clear and retrogradation-free, and showed viscosity 7450 cP at 70% solids, compared with 18,900 cP for enzyme-converted Glucidex 19.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:708454 CAPLUS  
 DOCUMENT NUMBER: 131:324056  
 TITLE: Starch hydrolyzates with a low dextrose equivalent, their preparation by nanofiltration fractionation, and their use  
 INVENTOR(S): Tang, Dan; Zhou, Liuming; Gerhardt, Robert; Abou-Nemeh, Ibrahim; Jaundoo, Carl; Parady, Tom  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: Eur. Pat. Appl., 18 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 953578	A2	19991103	EP 1999-401001	19990423
EP 953578	A3	20000412		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 5853487	A	19981229	US 1998-66651	19980427
US 6068705	A	20000530	US 1998-221902	19981228
PRIORITY APPLN. INFO.:			US 1998-66651	A 19980427
			US 1998-221902	A 19981228

AB A starch hydrolyzate with dextrose equivalent (DE) .gtorsim.18 is fractionated by nanofiltration using a Teflon membrane, a stainless steel membrane, a ceramic membrane, or a polymer membrane with a mol. weight cutoff of <4000, optionally together with hydrogenation, to give a starch hydrolyzate of low DE (.ltorsim.25) and preferably low polydispersity (.ltorsim.5). A glucose syrup (23.7% solids) with DE .apprx.42, obtained by acid conversion, was subjected to nanofiltration at 50°/32.8 + 106 Pa using an ASP 40 membrane (sulfonated polysulfone) with recycling until reaching DE 14.5 (polydispersity 1.59). An emulsion containing orange oil 4.8, lecithin 2.8, water 50.8, and a starch hydrolyzate obtained by nanofiltration 41.6% was stable for ≥30 days at 60°, compared with 2 days when a com. maltodextrin replaced the starch hydrolyzate.

L14 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:450833 CAPLUS  
 DOCUMENT NUMBER: 131:87150  
 TITLE: Fried snacks prepared by using flour, hydrolyzed starch, polyol fatty acid polyester, and other ingredients  
 INVENTOR(S): Reed, Jada Dawn; Seiden, Paul; Zimmerman, Stephen Paul  
 PATENT ASSIGNEE(S): The Procter & Gamble Company, USA  
 SOURCE: U.S., 6 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5925396	A	19990720	US 1997-963638	19971103
PRIORITY APPLN. INFO.:			US 1996-644767	B1 19960510

AB A process for preparing reduced fat shaped snack products having a light, crispy, crunchy texture is disclosed. A dough is formed: (1) from about 50-70% of a source of starch-based flour; (2) at least .apprx.3% hydrolyzed starch with a DE of about 5-30; (3) about 0.5-6% fatty acid polyglycerol ester emulsifier with a saponification value of 80-135 and a hydroxyl value of 300-575, the fatty acid of the ester comprising palmitic and stearic acid and the polyglycerol ester being >40% monoester; (4) about 20-40% added water; and (5) from about 1-6% polyol fatty acid polyester. This dough is formed into sheets from which snack pieces are cut. The snack pieces are fried to provide a snack having 20-38% nondigestible fat and <0.5 gm/30 gm serving of digestible fat. Thus, 53.10% potato flakes and 5.90% potato granules are blended with a

hexapolyglycerol monoester of palmitic and stearic acids and olean;  
maltodextrin (DE 18) and other ingredients are also  
 added to the dough.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:439244 CAPLUS

DOCUMENT NUMBER: 131:87147

TITLE: Fried snacks prepared by using flour, hydrolyzed  
 starch, fatty acid polyglycerol ester emulsifier, and  
 other ingredients

INVENTOR(S): Reed, Jada Dawn; Seiden, Paul; Zimmerman, Stephen Paul

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: U.S., 7 pp., Cont. of U.S. Ser. No. 644,768,  
 abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5922386	A	19990713	US 1997-963225	19971103

PRIORITY APPLN. INFO.: US 1996-644768 B1 19960510

AB A process for preparing reduced fat shaped snack products having a light,  
 crispy, crunchy texture is disclosed. A dough is formed: (1) from about  
 50-70% of a source of starch-based flour; (2) at least .apprx.3%  
 hydrolyzed starch with a DE of about 5-30; (3) about 0.5-6%  
 fatty acid polyglycerol ester emulsifier with a saponification value of 80-135 and  
 a hydroxyl value of 300-575, the fatty acid of the ester comprising  
 palmitic and stearic acid and the polyglycerol ester being >40% monoester;  
 (4) about 20-40% added water; and (5) about 1-6% fat. This dough is  
 formed into sheets from which snack pieces are cut. The snack pieces are  
 fried to provide a snack with 20-38% fat. Thus, 53.10% potato flakes and  
 5.90% potato granules are blended with a hexapolyglycerol monoester of  
 palmitic and stearic acids and olean; maltodextrin (DE  
 18) and other ingredients are also added to the dough.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:21539 CAPLUS

DOCUMENT NUMBER: 130:83112

TITLE: Nanofiltration fractionation process for producing  
 low-dextrose-equivalent starch hydrolyzates and their  
 blending with other carbohydrates

INVENTOR(S): Tang, Dan; Zhou, Liuming; Gerhardt, Robert

PATENT ASSIGNEE(S): Roquette Freres, Fr.

SOURCE: U.S., 11 pp.  
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5853487	A	19981229	US 1998-66651	19980427
US 6068705	A	20000530	US 1998-221902	19981228
CA 2269996	A1	19991027	CA 1999-2269996	19990423
EP 953578	A2	19991103	EP 1999-401001	19990423
EP 953578	A3	20000412		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000001502	A	20000107	JP 1999-120655	19990427
US 6348264	B1	20020219	US 2000-567315	20000509

PRIORITY APPLN. INFO.: US 1998-66651 A2 19980427  
 US 1998-221902 A 19981228

AB Non-retrograding starch hydrolyzate is manufactured by fractionating a starch  
 hydrolyzate comprising a dextrose equivalent (DE) >21 using a



nanofiltration membrane, e.g., Teflon, stainless steel, ceramic, etc., membrane having mol. weight cut-off of <4,000 dalton, to result in a low-DE starch hydrolyzate fraction comprising a DE <25. A process for producing a non-retrograding, low-DE starch hydrolyzate blend involves combining the product produced by the process with a carbohydrate, e.g., a sugar alc., glycerol, inulin, etc., in a predetd. blending ratio to result in a low-DE starch hydrolyzate blend, useful, e.g., as a beverage ingredient. A process for hydrogenating a low-DE starch hydrolyzate fraction produced by the process is also claimed.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:569865 CAPLUS  
DOCUMENT NUMBER: 117:169865  
TITLE: Preparation of an aerosol packaged glaze forming composition  
INVENTOR(S): Smith, Robert M.  
PATENT ASSIGNEE(S): Par-Way Group, USA  
SOURCE: U.S., 4 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5128161	A	19920707	US 1991-668159	19910312
PRIORITY APPLN. INFO.:			US 1991-668159	19910312

AB A method for packaging a glaze formulation that is free of egg white as an aerosol spray is described. The glaze contains dextrin (preferably maltodextrin, DE 1-20%) 10-30, a plasticizer 0-6, a secondary film former 0-4% with the balance water and an antimicrobial agent. Cl ions are removed by ion-exchange and the preparation is pasteurized, purged with N and packaged in aerosol form. The preparation has a pH low enough to prevent bacterial growth, but not low enough to attack the container.

L14 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:121118 CAPLUS  
DOCUMENT NUMBER: 110:121118  
TITLE: Perfumed composition with a deodorizing or antiperspirant activity  
INVENTOR(S): Holzner, Guenter  
PATENT ASSIGNEE(S): Firmenich S. A., Switz.  
SOURCE: Eur. Pat. Appl., 13 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 279328	A2	19880824	EP 1988-101861	19880209
EP 279328	A3	19890104		
EP 279328	B1	19920603		
R: DE, ES, FR, GB, IT				
CH 675966	A5	19901130	CH 1987-647	19870220
ES 2033948	T3	19930401	ES 1988-101861	19880209
ZA 8801101	A	19881026	ZA 1988-1101	19880217
US 4803195	A	19890207	US 1988-157422	19880217
AU 8811967	A	19880825	AU 1988-11967	19880219
AU 609356	B2	19910426		
BR 8800690	A	19881004	BR 1988-690	19880219
JP 64000012	A	19890105	JP 1988-35432	19880219
JP 2574365	B2	19970122		
CA 1299108	C	19920421	CA 1988-559292	19880219
PRIORITY APPLN. INFO.:			CH 1987-647	A 19870220

AB The title composition comprises an antiperspirant, such as an Al compound and a

fragrance. The fragrance is an aqueous emulsion, or is microencapsulated, and comprises a film-forming support [poly(vinyl acetate), poly(vinyl alc.), dextrin, starch, pectin, gum, cellulose derivs., etc] and an emulsifier, such as mono- or diglycerides, fatty acid sorbitol or sugar esters, their alkoxylated derivs., etc. The composition releases the fragrance upon contact with moisture, such as sweat, and is spontaneously reincapsulated upon drying in situ, such as on the skin. The composition may be formulated as sticks, roll-ons, smooth-ons, aerosols, or powders. A solution of 8.9 g Glucidex 21 (maltodextrin), 1.0 g Nadex 722 (maltodextrin), and 0.1 g Na alginate in 658 g H<sub>2</sub>O was treated with 20 g Locron L (50% Al hydroxychloride solution), and, at 70°, with 4 g Emulgrade 1000 NI (self-emulsifying nonionic wax) and, at, 40°, with a perfume, to give an antiperspirant, which was shaped in the form of a roll-on.

L22 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2005:216901 CAPLUS  
 DOCUMENT NUMBER: 142:300195  
 TITLE: Organic cooling medium and its uses  
 INVENTOR(S): Knauf, Jeff  
 PATENT ASSIGNEE(S): Alaska Ocean Products, USA  
 SOURCE: PCT Int. Appl., 13 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021732	A2	20050310	WO 2004-US28597	20040902
WO 2005021732	A3	20050818		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004269423	A1	20050310	AU 2004-269423	20040902
CA 2537528	A1	20050310	CA 2004-2537528	20040902
US 2005184272	A1	20050825	US 2004-932927	20040902
EP 1670873	A2	20060621	EP 2004-782984	20040902
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1845978	A	20061011	CN 2004-80025124	20040902
BR 2004014015	A	20061024	BR 2004-14015	20040902
JP 2007504326	T	20070301	JP 2006-525443	20040902
KR 2007020368	A	20070221	KR 2006-704321	20060302
NO 2006001467	A	20060403	NO 2006-1467	20060331
IN 2006CN01125	A	20070831	IN 2006-CN1125	20060331
PRIORITY APPLN. INFO.:			US 2003-499803P	P 20030902
			WO 2004-US28597	W 20040902

AB An organic cooling medium that includes a cooling agent and which may further include a chloride salt. The cooling agent selected from the group consisting of carbohydrates, sugar alcs., glycosides, maltodextrins, hydrogenated maltodextrins, starch hydrolyzates, non-toxic oils, and mixts. thereof.

L22 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:433673 CAPLUS  
 DOCUMENT NUMBER: 140:412361  
 TITLE: Chewable solid unit dosage forms and methods for delivery of active agents into occlusal surfaces of teeth  
 INVENTOR(S): Scott, Douglas Craig; Eversole, Sandra Lynn; Burgess, Steven Carl; Best, John Michael; Faller, Robert Vincent  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 21 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004101494	A1	20040527	US 2003-706104	20031112
CA 2504488	A1	20040610	CA 2003-2504488	20031125
CA 2504489	A1	20040610	CA 2003-2504489	20031125
WO 2004047784	A1	20040610	WO 2003-US37879	20031125

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2004047785 A1 20040610 WO 2003-US37880 20031125

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003293110 A1 20040618 AU 2003-293110 20031125

AU 2003298723 A1 20040618 AU 2003-298723 20031125

EP 1565154 A1 20050824 EP 2003-790102 20031125

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

EP 1575543 A1 20050921 EP 2003-796480 20031125

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1713884 A 20051228 CN 2003-80103898 20031125

CN 1713886 A 20051228 CN 2003-80103910 20031125

JP 2006509767 T 20060323 JP 2004-555782 20031125

JP 2006509768 T 20060323 JP 2004-555783 20031125

RU 2302855 C2 20070720 RU 2005-115451 20031125

RU 2304426 C2 20070820 RU 2005-115450 20031125

MX 2005PA05703 A 20050726 MX 2005-PA5703 20050526

PRIORITY APPLN. INFO.: US 2002-429234P P 20021126

WO 2003-US37879 W 20031125

WO 2003-US37880 W 20031125

AB The present invention relates to methods and an oral care composition for topical, oral administration in a human or other animal comprising: (a) from about 1% to about 40%, by weight of the composition, of a retentive agent selected from the group consisting of water-soluble hydrophilic gums, water-soluble hydrophilic polymers, and mixts. thereof, the retentive agent having the property of hydrating upon exposure to water or saliva resulting in the composition forming an intact hydrated mass to provide a Retention Index of about 1 to about 4; and (b) a safe and effective amount of a topical, oral care carrier; wherein the composition is a non-cariogenic, chewable solid unit dosage form; and the composition comprises less than about 65% by weight of water-insol. particulates. The present invention further relates to an oral care dentifrice composition comprising: (a) from about 30% to about 65%, by weight of the composition, of a water-insol., particulate retentive agent having a water solubility of less than about 1 g/30 g at 25°; (b) a safe and effective amount of an oral care active; (c) a safe and effective amount of a surfactant; (d) a safe and effective amount of a buffer; wherein the composition is a chewable dentifrice solid unit dosage form, is non-effervescent, non-cariogenic; and wherein the composition has a Retention Index of from about 1 to about 4. For example, a chewable compressed tablet was formulated containing NaF 0.243, Na lauryl sulfate 1.5, silica 20, Na saccharin 0.5, flavor 1.5, xanthan gum 2, microcryst. cellulose 5, PVP 3, crosslinked Na CMC 2, sorbitol 30, mannitol 33.257, and Zn stearate 1 %.

L22 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:249237 CAPLUS

DOCUMENT NUMBER: 140:286532

TITLE: Hydrogenated condensed palatinose preparation and use in food and drug manufacture.

INVENTOR(S): Haji, Begli Alireza; Klingenberg, Michael; Kunz, Markwart; Vogel, Manfred

PATENT ASSIGNEE(S): Suedzucker Aktiengesellschaft Mannheim/Ochsenfurt, Germany

SOURCE: Ger. Offen., 38 pp., Division of Ger. Offen.  
10,242,062.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10262005	A1	20040325	DE 2002-10262005	20020911
DE 10262005	B4	20051110		
DE 10242062	A1	20040325	DE 2002-10242062	20020911
DE 10242062	B4	20070215		

PRIORITY APPLN. INFO.: DE 2002-10242062 A2 20020911  
DE 2002-10262005 A2 20020911

AB The present invention concerns procedures for the production of condensed palatinose in hydrogenated form and use of the hydrogenated condensed palatinose in manufacture of food and drugs.

L22 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:246919 CAPLUS  
DOCUMENT NUMBER: 140:286531  
TITLE: hydrogenated condensed palatinose preparation and use in food and drug manufacture  
INVENTOR(S): Haji, Begli Alireza; Klingenberg, Michael; Kunz, Markwart; Vogel, Manfred  
PATENT ASSIGNEE(S): Suedzucker Aktiengesellschaft Mannheim/Ochsenfurt, Germany  
SOURCE: Ger. Offen., 44 pp., Division of Ger. Offen.  
10,262,005  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10242062	A1	20040325	DE 2002-10242062	20020911
DE 10242062	B4	20070215		
DE 10262005	A1	20040325	DE 2002-10262005	20020911
DE 10262005	B4	20051110		
CA 2498659	A1	20040415	CA 2003-2498659	20030902
WO 2004031202	A2	20040415	WO 2003-EP9725	20030902
WO 2004031202	A3	20040506		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003271575	A1	20040423	AU 2003-271575	20030902
EP 1539779	A2	20050615	EP 2003-753376	20030902

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003014247	A	20050726	BR 2003-14247	20030902
CN 1681831	A	20051012	CN 2003-821413	20030902
JP 2006512298	T	20060413	JP 2004-540575	20030902
US 2005222406	A1	20051006	US 2005-527523	20050310

PRIORITY APPLN. INFO.: DE 2002-10262005 A2 20020911  
DE 2002-10242062 A2 20020911  
WO 2003-EP9725 W 20030902

AB The present invention concerns procedures for the production of condensed palatinose in hydrogenated form and use of the hydrogenated condensed palatinose in manufacture of food and drugs.

L22 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

10653037

ACCESSION NUMBER: 2003:335838 CAPLUS  
 DOCUMENT NUMBER: 138:339920  
 TITLE: Soluble hydrogenated starch derivatives containing of  
 nondigestible dietary fibers  
 INVENTOR(S): Fuertes, Patrick  
 PATENT ASSIGNEE(S): Fr.  
 SOURCE: Fr. Demande, 24 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2831541	A1	20030502	FR 2001-14091	20011030
FR 2831541	B1	20050819		
CA 2408157	A1	20030430	CA 2002-2408157	20021016
EP 1308463	A1	20030507	EP 2002-292643	20021024
EP 1308463	B1	20070822		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

US 2003096055	A1	20030522	US 2002-281686	20021028
CN 1417233	A	20030514	CN 2002-152902	20021030
JP 2003183304	A	20030703	JP 2002-316684	20021030

PRIORITY APPLN. INFO.: FR 2001-14091 A 20011030

AB The invention relates to soluble hydrogenated starch derivs. containing  
 nondigestible dietary fibers, which has an ICUMSA color reduction of at least  
 50%, a sugar content reduction decreased by to more 30%, compared to the soluble  
 starch from which it was prepared

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:752315 CAPLUS  
 DOCUMENT NUMBER: 137:246811  
 TITLE: Maltodextrin-containing food product with sustained  
 energy release  
 INVENTOR(S): Saniez, Marie-Helene  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245583	A1	20021002	EP 2002-290784	20020328
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822642	A1	20021004	FR 2001-4412	20010330
FR 2822642	B1	20050304		
CA 2379203	A1	20020930	CA 2002-2379203	20020328
WO 2002079266	A1	20021010	WO 2002-FR1089	20020328
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002257853	A1	20021015	AU 2002-257853	20020328
CN 1507455	A	20040623	CN 2002-809346	20020328
JP 2004526744	T	20040902	JP 2002-577889	20020328
US 2002187247	A1	20021212	US 2002-113463	20020329
MX 2003PA08910	A	20040630	MX 2003-PA8910	20030930
US 2006160767	A1	20060720	US 2005-218625	20050906

PRIORITY APPLN. INFO.: FR 2001-4412 A 20010330  
 WO 2002-FR1089 W 20020328

US 2002-113463 A3 20020329

AB A food product with sustained energy release contains 50-99.9% (preferably 70-99.9%) branched maltodextrins (15-35% 1-6 glucoside linkages; reducing sugar content <20%; polymolecularity index <5; Mn <4500). Thus, a carbonated beverage for athletes contains 73.68 g of nutritional composition (95% branched maltodextrins by weight) per L, plus sweeteners, flavorings, and preservatives.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:752314 CAPLUS  
 DOCUMENT NUMBER: 137:246810  
 TITLE: Fiber-rich table sweeteners containing branched maltodextrin  
 INVENTOR(S): Serpelloni, Michel  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245582	A1	20021002	EP 2002-290760	20020327
EP 1245582	B1	20070725		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822646	A1	20021004	FR 2001-4414	20010330
FR 2822646	B1	20050311		
WO 2002079264	A1	20021010	WO 2002-FR1055	20020327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002308030	A1	20021015	AU 2002-308030	20020327
CN 1507457	A	20040623	CN 2002-809349	20020327
JP 2004526447	T	20040902	JP 2002-577887	20020327
AT 368056	T	20070815	AT 2002-290760	20020327
CA 2379195	A1	20020930	CA 2002-2379195	20020328
US 2002192355	A1	20021219	US 2002-113142	20020329
MX 2003PA08907	A	20040630	MX 2003-PA8907	20030930
PRIORITY APPLN. INFO.:			FR 2001-4414	A 20010330
			WO 2002-FR1055	W 20020327

AB A fiber-rich sweetener contains 3-99% (preferably 10-95%) maltodextrins, the maltodextrins being branched (15-35% 1-6 glucoside linkages; reducing sugar content <20%; polymolecularity index <5; Mn <4500). The sweetener is stable at acid pH and(or) with heating. Thus, a sweetener formulation may include 97% branched maltodextrins and 3% aspartame.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:752313 CAPLUS  
 DOCUMENT NUMBER: 137:246809  
 TITLE: Low-calorie foods containing branched maltodextrin  
 INVENTOR(S): Brendel, Raymond; Boursier, Bernard; Leroux, Patrick  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

10653037

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245581	A1	20021002	EP 2002-290759	20020327
EP 1245581	B1	20070509		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822643	A1	20021004	FR 2001-4415	20010330
FR 2822643	B1	20050304		
WO 2002079265	A1	20021010	WO 2002-FR1056	20020327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002255076	A1	20021015	AU 2002-255076	20020327
AU 2002255076	B2	20070104		
CN 1507454	A	20040623	CN 2002-809344	20020327
JP 2004524849	T	20040819	JP 2002-577888	20020327
AT 361937	T	20070615	AT 2002-290759	20020327
CA 2379206	A1	20020930	CA 2002-2379206	20020328
US 2002192344	A1	20021219	US 2002-112978	20020329
US 7138154	B2	20061121		
MX 2003PA08917	A	20040630	MX 2003-PA8917	20030930
PRIORITY APPLN. INFO.:			FR 2001-4415	A 20010330
			WO 2002-FR1056	W 20020327

AB Caloric material is replaced completely or partially with branched maltodextrins (15-35% 1-6 glucoside linkages; reducing sugar content <20%; polymolecularity index <5; Mn <4500) to produce low-calorie foods. Thus, a cookie formulation may contain 6.2% branched maltodextrin and reduced levels of fat and sucrose.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:752312 CAPLUS

DOCUMENT NUMBER: 137:253040

TITLE: Fiber-containing enteral nutrients containing branched maltodextrin

INVENTOR(S): Saniez, Marie-Helene

PATENT ASSIGNEE(S): Roquette Freres, Fr.

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245580	A1	20021002	EP 2002-290751	20020326
EP 1245580	B1	20070110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822645	A1	20021004	FR 2001-4413	20010330
FR 2822645	B1	20050311		
WO 2002079262	A1	20021010	WO 2002-FR1038	20020326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002253265	A1	20021015	AU 2002-253265	20020326
AU 2002253265	B2	20070426		
CN 1507456	A	20040623	CN 2002-809348	20020326



10653037

JP 2004524366 T 20040812 JP 2002-577885 20020326  
 CA 2379210 A1 20020930 CA 2002-2379210 20020328  
 US 2003039740 A1 20030227 US 2002-113470 20020329  
 US 6737414 B2 20040518  
 MX 2003PA08911 A 20040630 MX 2003-PA8911 20030930  
 PRIORITY APPLN. INFO.: FR 2001-4413 A 20010330  
 WO 2002-FR1038 W 20020326

AB A fiber-rich enteral nutrition product contains 0.5-20% (most preferably 1-5%) maltodextrins, the maltodextrins being branched (15-35% 1-6 glucoside linkages; reducing sugar content <20%; polymolecularity index <5; Mn <4500). The composition is stable at acid pH and(or) with heating. Thus, a formulation may include 3% branched maltodextrins plus vegetable oils, milk and soybean proteins, vitamins, and mineral nutrients.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:752311 CAPLUS  
 DOCUMENT NUMBER: 137:246808  
 TITLE: Sugar-free confectionery containing branched maltodextrin and polyol sweetener  
 INVENTOR(S): Serpelloni, Michel  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245579	A1	20021002	EP 2002-290750	20020326
EP 1245579	B1	20070228		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822644	A1	20021004	FR 2001-4418	20010330
FR 2822644	B1	20050311		
WO 2002079263	A1	20021010	WO 2002-FR1039	20020326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002253266	A1	20021015	AU 2002-253266	20020326
CN 1513001	A	20040714	CN 2002-811131	20020326
JP 2004525637	T	20040826	JP 2002-577886	20020326
AT 355307	T	20060315	AT 2002-290750	20020326
CA 2379191	A1	20020930	CA 2002-2379191	20020328
US 2002192343	A1	20021219	US 2002-112278	20020329
US 6767576	B2	20040727		
MX 2003PA08918	A	20040630	MX 2003-PA8918	20030930

PRIORITY APPLN. INFO.: FR 2001-4418 A 20010330  
 WO 2002-FR1039 W 20020326

AB Sugar-free confectionery is formulated with a sweetening composition composed of branched maltodextrins (15-35% 1-6 glucoside linkages; reducing sugar content <20%; polymolecularity index <5; Mn <4500) and a polyol (erythritol, mannitol, or maltitol). The branched maltodextrin constitutes 0.5-75% of the sweetened composition and the polyol accounts for <13.5% (preferably <10%). Thus, a gelatin-based chewing gum formulation contains 69.7% branched maltodextrins, 9.4% erythritol, 4.9% vegetable fat, 1.0% gelatin, plus other ingredients.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:752310 CAPLUS  
 DOCUMENT NUMBER: 137:246865

TITLE: Fiber-rich beverages containing branched maltodextrins  
 INVENTOR(S): Serpelloni, Michel  
 PATENT ASSIGNEE(S): Roquette Freres, Fr.  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1245578	A1	20021002	EP 2002-290744	20020325
EP 1245578	B1	20070418		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
FR 2822647	A1	20021004	FR 2001-4410	20010330
FR 2822647	B1	20050304		
WO 2002079261	A1	20021010	WO 2002-FR1030	20020325
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002251149	A1	20021015	AU 2002-251149	20020325
CN 1511165	A	20040707	CN 2002-809350	20020325
JP 2004525636	T	20040826	JP 2002-577884	20020325
AT 360036	T	20070515	AT 2002-290744	20020325
CA 2378700	A1	20020930	CA 2002-2378700	20020328
US 2003077368	A1	20030424	US 2002-113253	20020329
US 7186433	B2	20070306		
MX 2003PA08908	A	20040630	MX 2003-PA8908	20030930
PRIORITY APPLN. INFO.:			FR 2001-4410	A 20010330
			WO 2002-FR1030	W 20020325

AB A fiber-rich low-calorie beverage contains 1.5-90 g maltodextrin/L, the maltodextrins being branched (15-35% 1-6 glucoside linkages; reducing sugar content <20%; polymolecularity index <5; Mn <4500). The beverage is stable at acid pH and(or) with heating. Thus, a carbonated beverage is formulated to contain branched maltodextrins 73.68, aspartame 0.118, acesulfame K 0.118, citric acid 1.9, and sodium benzoate 0.09 g/L, plus other ingredients.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:90447 CAPLUS  
 DOCUMENT NUMBER: 136:136532  
 TITLE: Co-crystallized polyols and hydrogenated maltodextrin and its manufacture  
 INVENTOR(S): Cunningham, Mary Lou; Kuenzle, Charles E.; Stanizewski, Paul S.; Jamieson, Peter  
 PATENT ASSIGNEE(S): SPI Polyols, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 8 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002011181	A1	20020131	US 2001-874655	20010605
US 6875460	B2	20050405		

PRIORITY APPLN. INFO.: US 2000-209555P P 20000606

AB The co-crystallization of polyols and hydrogenated maltodextrin provides a sweetener product that is sucrose-free, yet has a reduced sensory cooling effect compared to the original polyol(s). The reduced sensory cooling effect is due to an increase of the heat of solution that is observed when

polyols are co-crystallized with hydrogenated maltodextrin. The product is a sucrose-free sweetener that does not demonstrate the strong sensory cooling effect typically found with polyol sweeteners.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:102933 CAPLUS  
DOCUMENT NUMBER: 132:107174  
TITLE: Preparation of alditols composition  
INVENTOR(S): Fan, Zhigang  
PATENT ASSIGNEE(S): Peop. Rep. China  
SOURCE: Faming Zhuanti Shenqing Gongkai Shuomingshu, 6 pp.  
CODEN: CNXXEV  
DOCUMENT TYPE: Patent  
LANGUAGE: Chinese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
CN 1179441	A	19980422	CN 1997-119127	19971013
CN 1070886	B	20010912		

PRIORITY APPLN. INFO.: CN 1997-119127 19971013

AB The composition comprises sorbitol 0.1-3.0, maltitol 20-50, maltotriose alc. 20-50, maltotetraose alc. 8-20, and maltopentaose alc. - maltoheptaose alc. 20-30%. The maltose may be replaced by isomaltose. The composition is prepared by diluting 70% malt oligosaccharide to 40-45% solution, hydrogenating with Ni as catalyst at 100-150° and 4-8 MPa, purifying with cationic and anionic exchange resin, decoloring with activated C, concentrating at 100-110° and (-0.9) MPa, crystallizing, and drying.

L22 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:499644 CAPLUS  
DOCUMENT NUMBER: 127:160801  
TITLE: Retardation of the hardening of starch gels by polyols. III. Retardation effects of sugar alcohols on hardening of wheat starch gels  
AUTHOR(S): Amano, Takeo; Miura, Makoto; Hayashi, Shinichi  
CORPORATE SOURCE: Food Res. Inst., Aichi Prefect. Gov., Nagoya, 451, Japan  
SOURCE: Nippon Shokuhin Kagaku Kogaku Kaishi (1997), 44(7), 485-493  
CODEN: NSKKEF; ISSN: 1341-027X  
PUBLISHER: Nippon Shokuhin Kagaku Kogakkai  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

AB The influences of sugar alcs. on hardening and water mobility of wheat starch gels stored at 2° were investigated by kinetic treatment on rheol. parameters (creep compliance) and by 170-NMR technique. In general, the hardening process of sugar alcs.-supplemented gels could be separated into the 4 regions similar to that of saccharides-supplemented gels in the previous report. The initial creep compliance (J0I) of all the sugar alcs.-supplemented gels became smaller than that of control gels, indicating that the gels became harder. Sugar alcs.-supplemented gels also appeared to be harder than the saccharides-supplemented gels in the most cases. Com. hydrogenated maltooligosaccharides and hydrogenated isomalto-oligosaccharides reduced the hardening rate constant, but meso-erythritol, D-xylitol, D-arabitol, D-ribitol, and D-sorbitol increased the constant compared with the control gels. Apparent transverse relaxation time T2 was reduced by addition of meso-erythritol, maltitol, D-sorbitol, and D-arabitol compared with the control gels, and the values gradually decreased during the storage period. But no remarkable differences were observed among the effects of sugar alcs. on T2 during storage, gel hardening rate, and water mobility in the gel could not be related clearly.

L22 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:630322 CAPLUS  
DOCUMENT NUMBER: 123:12399  
TITLE: Powdered antifoaming compositions for laundry detergents

INVENTOR(S): Tamura, Shigeru; Tsumadori, Masaki; Ogurisu, Hiroshi  
 PATENT ASSIGNEE(S): Kao Corp, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07070594	A	19950314	JP 1993-218810	19930902
PRIORITY APPLN. INFO.:			JP 1993-218810	19930902

AB The title compns., showing storage stability in the presence of surfactants, contain silicones and supports comprising mixts. of terminal-nonreduced water-soluble (chemical processed) starch (derivs.) having 7-20 glucose units and hydrogenated (terminal-reduced) starch. A blend of maltodextrin, reduced maltodextrin, and a silicone (FS Antifoam) was mixed with polyethylene glycol and Na<sub>2</sub>SO<sub>4</sub> and used to prepare a powder showing good water solubility and retention of antifoaming activity in a detergent powder.

L22 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1974:427518 CAPLUS  
 DOCUMENT NUMBER: 81:27518  
 TITLE: Starch hydrolyzates  
 INVENTOR(S): Huchette, Michel; Fleche, Guy  
 PATENT ASSIGNEE(S): Roquette Freres  
 SOURCE: Ger. Offen., 13 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2324470	A1	19731206	DE 1973-2324470	19730515
DE 2324470	B2	19790705		
DE 2324470	C3	19800424		
FR 2184454	A1	19731228	FR 1972-17703	19720517
US 3890300	A	19750617	US 1973-359514	19730511
CA 975359	A1	19750930	CA 1973-171341	19730511
GB 1436382	A	19760519	GB 1973-22636	19730511
NL 7306736	A	19731120	NL 1973-6736	19730515
SE 416474	B	19810105	SE 1973-6879	19730515
SE 416474	C	19810423		
NO 138696	C	19781025	NO 1973-2042	19730516
BE 799678	A1	19731119	BE 1973-131230	19730517
ES 414812	A1	19760201	ES 1973-414812	19730517
CH 572492	A5	19760213	CH 1973-7071	19730517
FI 57115	B	19800229	FI 1973-1614	19730517
FI 57115	C	19800610		

PRIORITY APPLN. INFO.: FR 1972-17703 A 19720517

AB Enzyme- and acid-resistant starch [9005-25-8] hydrolyzates consisting of propoxylated glucose chains, useful as thickeners in foods of low calorie content, were prepared from thin starch pastes by hydrolysis, hydrogenation, and propoxylation or propoxylation, hydrolysis, and hydrogenation. Thus, a solution of 304 g NaOH and 800 g propylene oxide [75-56-9] were added to 40% hydrogenated maltodextrin [9050-36-6] sirup (dextrose equivalent 37 prior to hydrogenation). The mixture was kept 24 hr at 40.deg., passed through a cation exchange resin and charcoal, and evaporated in vacuo to give a starch hydrolyzate containing 75% solids (9.85% propoxy groups).

L22 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1970:90823 CAPLUS  
 DOCUMENT NUMBER: 72:90823  
 TITLE: Nonreducing hydrolyzates of starch  
 INVENTOR(S): Masuda, Tamee; Yamanoi, Hidesuke; Machida, Isamu;  
 Ogawa, Akihiko  
 PATENT ASSIGNEE(S): Nikken Chemicals Co., Ltd.  
 SOURCE: Jpn. Tokkyo Koho, 10 pp.

10653037

CODEN: JAXXAD  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 44018898	B4	19690816	JP	19631221

AB Hydrogenation of dextrins and maltodextrins in the presence of Raney Ni proceeds without isomerization and decomposition by maintaining the pH at 7-9. Thus, a mixture of 350 kg 30% aqueous dextrin solution, 6 l. 20% aqueous NaH<sub>2</sub>PO<sub>4</sub> and 10 kg Raney Ni at pH 8 (NaOH) was hydrogenated 15 min at 50° 110 kg/cm<sup>2</sup> H, treated with 2 l. 20% aqueous NaH<sub>2</sub>PO<sub>4</sub>, the temp. was raised to 125°, and the hydrogenation completed in 30 min to give 190 kg viscous liquid (concentration 50%) containing 8% D-glucitol and 91% oligosaccharides and other hydrogenated products and water.

L29 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS-on STN  
 ACCESSION NUMBER: 2003:991691 CAPLUS  
 DOCUMENT NUMBER: 140:40975  
 TITLE: enzymic production and use of galactosyl isomaltose preparations  
 INVENTOR(S): Haji Begli, Alireza; Klingeberg, Michael; Kunz, Markwart; Mattes, Ralf; Schroeder, Sven; Thiem, Joachim; Vogel, Manfred  
 PATENT ASSIGNEE(S): Suedzucker Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 92 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003104473	A2	20031218	WO 2003-EP5999	20030606
WO 2003104473	A3	20040219		
WO 2003104473	A8	20040408		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2490037	A1	20031218	CA 2003-2490037	20030606
AU 2003245923	A1	20031222	AU 2003-245923	20030606
BR 2003011645	A	20050222	BR 2003-11645	20030606
EP 1513942	A2	20050316	EP 2003-738005	20030606
EP 1513942	B1	20060913		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1668755	A	20050914	CN 2003-816407	20030606
JP 2005531611	T	20051020	JP 2004-511532	20030606
AT 339512	T	20061015	AT 2003-738005	20030606
US 2006008574	A1	20060112	US 2005-515488	20050725
PRIORITY APPLN. INFO.:				
			DE 2002-10225242	A 20020607
			WO 2003-EP5999	W 20030606

AB The invention relates to a method for production of galactosyl isomaltose and galactosyl isomaltulose derivs. and compns. containing the same for use in food, feed and pharmaceutical applications. Thus, lactose and isomaltose were mixed with  $\beta$ -galactosidase and reacted for 48 h at 37 °C. The resulting oligosaccharide produced was determined to be  $\beta$ -1,3-galactosyl-isomaltose.

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	177731	hydrogenat\$6	US-PGPUB; USPAT	OR	ON	2007/09/19 10:58
L2	10406	maltodextrin	US-PGPUB; USPAT	OR	ON	2007/09/19 10:58
L3	745	maltooligosaccharide (malto adj oligosaccharide)	US-PGPUB; USPAT	OR	ON	2007/09/19 10:59
L4	1116	1 same (2 3)	US-PGPUB; USPAT	OR	ON	2007/09/19 10:59
L5	223613	starch	US-PGPUB; USPAT	OR	ON	2007/09/19 10:59
L6	215708	hydrolyzate hydrolysate hydrolysis	US-PGPUB; USPAT	OR	ON	2007/09/19 10:59
L7	9329	5 near4 6	US-PGPUB; USPAT	OR	ON	2007/09/19 10:59
L8	2135	1 same 7	US-PGPUB; USPAT	OR	ON	2007/09/19 11:00
L9	740	8 and (2 3)	US-PGPUB; USPAT	OR	ON	2007/09/19 11:00
L10	1526	4 9	US-PGPUB; USPAT	OR	ON	2007/09/19 11:00
L11	2617676	@ad>"19990802"	US-PGPUB; USPAT	OR	ON	2007/09/19 11:00
L12	384	10 not 11	US-PGPUB; USPAT	OR	ON	2007/09/19 11:01
L13	80031	dp (degree near3 polymerization)	US-PGPUB; USPAT	OR	ON	2007/09/19 11:01
L14	1296953	de (dextrose adj equiv\$6)	US-PGPUB; USPAT	OR	ON	2007/09/19 11:02
L15	3588047	metal raney ni nickel pressure ph temperature temp metal\$4 catalyst catalytic	US-PGPUB; USPAT	OR	ON	2007/09/19 11:05
L16	376	12 and (13 14 15)	US-PGPUB; USPAT	OR	ON	2007/09/19 11:03
L17	354	16 and 2	US-PGPUB; USPAT	OR	ON	2007/09/19 11:04
L18	2170902	metal raney ni nickel catalyst catalytic	US-PGPUB; USPAT	OR	ON	2007/09/19 11:05
L19	154	17 and 18	US-PGPUB; USPAT	OR	ON	2007/09/19 11:05